

**ABSTRACT**

The apparatus comprises a mold assembly including at least one bore therethrough having a cavity [(44)] therein defining the shape of the finished microneedle shape [(58)] to be formed therein. The bore has an inlet opening [(46)] and an exit opening [(45)]. The apparatus also comprises means for locating the polymer to be formed at one end of the cavity and means [(26)] for introducing fluid into the inlet opening of said bore and into the cavity. The apparatus also comprises exhaust means [(56)] communicating with the exit opening of the bore, so that introducing the fluid through the polymer causes the polymer to assume the shape of the cavity and the fluid forms a hollow channel [(52)] to define a needle-like structure [(58)] in the polymer as the fluid is exhausted through the cavity [(44)] and the bore.